

CLAIM AMENDMENTS

1 1. (Currently Amended) A method for managing a communications arrangement
2 comprising a plurality of participants, the method comprising the
3 computer-implemented steps of:
4 assigning, to a first participant from the plurality of participants, one or more
5 functions to be performed by the first participant;
6 prior to a failure of the first participant that prevents the first participant from
7 performing any of the one or more functions to be performed by the first
8 participant,
9 designating a second participant from the plurality of participants to
10 perform the one or more functions if any of one or more handoff
11 criteria are satisfied;
12 the first participant communicating with the second participant to indicate
13 that the second participant has been designated to perform the one
14 or more functions if any of the one or more handoff criteria are
15 satisfied;
16 in response to any of the one or more handoff criteria being satisfied, assigning
17 the one or more functions to the second participant; and
18 selecting, based upon performance of a plurality of communications channels and
19 at least one performance criterion, a first communications channel from
20 the a plurality of communications channels.

1 2. (Currently Amended) The method of Claim 1, further comprising the computer-
2 implemented steps of:
3 generating channel identification data that identifies the first communications
4 channel; ~~and~~
5 providing the channel identification data over the first communications channel to
6 one or more participants from the plurality of participants; and

7 receiving at least a first communication from the one or more participants over a
8 second communications channel from the plurality of communications
9 channels, wherein the second communications channel is determined
10 based on the channel identification data.

1 3. (Cancelled)

1 4. (Currently Amended) A method for managing, based on performance, a
2 communications arrangement comprising a plurality of participants, the method
3 comprising the computer-implemented steps of:
4 selecting, based upon performance of a plurality of communications channels, a
5 first communications channel from the plurality of communications
6 channels;
7 generating channel identification data that identifies the first communications
8 channel;
9 providing the channel identification data to one or more participants from the
10 plurality of participants;
11 receiving at least a first communication from the one or more participants over a
12 ~~second~~ the first communications channel from the plurality of
13 communications channels, wherein the ~~second~~ first communications
14 channel is determined based on the channel identification data;
15 assigning, to a first participant from the plurality of participants, one or more
16 functions to be performed by the first participant;
17 prior to a failure of the first participant, designating a second participant from the
18 plurality of participants to perform the one or more functions if any of one
19 or more handoff criteria are satisfied; and
20 wherein the plurality of communications channels correspond to a set of
21 frequencies and the first communication received from the one or more
22 participants is based on a hopping sequence among at least two
23 communications channels of the plurality of communications channels,
24 according to a frequency hopping protocol.

25 5. (Currently Amended) A method for assigning functions between participants and
26 selecting communications channels in a communications arrangement comprising
27 a plurality of participants, the method comprising the computer-implemented
28 steps of:
29 assigning, to a first participant from the plurality of participants, one or more
30 functions to be performed by the first participant;
31 prior to a failure of the first participant that prevents the first participant from
32 performing any of the one or more functions to be performed by the first
33 participant,
34 designating a second participant from the plurality of participants to
35 perform the one or more functions if any of one or more criteria are
36 satisfied;
37 the first participant communicating with the second participant to indicate
38 that the second participant has been designated to perform the one
39 or more functions if any of the one or more handoff criteria are
40 satisfied;
41 in response to any of the one or more criteria being satisfied, assigning the one or
42 more functions to the second participant;
43 selecting, based upon performance of a plurality of communications channels and
44 at least one specified criterion, a first communications channel from the
45 plurality of communications channels;
46 generating channel identification data that identifies the first communications
47 channel;
48 providing the channel identification data to one or more participants from the
49 plurality of participants; ~~and~~
50 receiving at least a first communication from the one or more participants over a
51 second communications channel from the plurality of communications
52 channels, wherein the second communications channel is determined
53 based on the channel identification data that identifies the first
54 communications channel; and

55 wherein the plurality of communications channels correspond to a set of
56 frequencies and the first communication received from the one or more
57 participants is based on a hopping sequence among at least two
58 communications channels of the plurality of communications channels,
59 according to a frequency hopping protocol.

1 6. (Currently Amended) The method ~~as recited in~~ of Claim 5, wherein:
2 communications between the plurality of participants are made ~~on different~~
3 ~~frequencies over time~~ using a frequency hopping sequence according to a
4 frequency hopping protocol;
5 the communications arrangement includes a wireless communications
6 arrangement; and
7 the plurality of participants includes a plurality of mobile devices.

1 7. (Cancelled)

1 8. (Currently Amended) The method of Claim 5, wherein the channel identification
2 data is first channel identification data, and wherein the method further comprises
3 the computer-implemented steps of:
4 selecting, based upon the performance of the plurality of communications
5 channels and the at least one specified criterion, a third communications
6 channel from the plurality of communications channels;
7 generating second channel identification data that identifies the third
8 communications channel;
9 providing the second channel identification data over a particular communications
10 channel of the plurality of communications channels to one or more
11 additional participants from the plurality of participants, wherein the
12 particular communications channel is not the third communications
13 channel; and

14 receiving at least a second communication from the one or more additional
15 participants over a fourth communications channel from the plurality of
16 communications channels, wherein the fourth communications channel is
17 determined based on the second channel identification data that identifies
18 the third communications channel.

1 9. (Currently Amended) The method of Claim 5, wherein the computer-
2 implemented step of providing the channel identification data to the one or more
3 participants further comprises the computer-implemented steps of:
4 providing the channel identification data to the one or more participants over a
5 third communications channel of the plurality of communications
6 channels, wherein the third communications channel is not the first
7 communications channel;
8 determining the performance of the plurality of communications channels used by
9 the plurality of participants; and
10 wherein at least the first communication from the one or more participants
11 includes data that indicates the performance of the third communications
12 channel.

1 10. (Currently Amended) The method of Claim 9, wherein: ~~at least the first~~
2 ~~communication from the one or more participants includes data that indicates the~~
3 ~~performance of the third communications channel~~
4 the performance of the plurality of communications channels is determined based
5 on a channel performance testing technique selected from the group
6 consisting of a received signal strength indicator, a header error check, a
7 cyclic redundancy check, and forward error correction;
8 the first communications device is a master participant;
9 the second communications device is an associate master participant; and
10 the one or more communications devices are slave participants.

1 11. (Currently Amended) The method of Claim 5, wherein the computer-implemented
2 step of selecting the first communications channel from the plurality of
3 communications channels further comprises the computer-implemented steps of:
4 classifying one or more communications channels of the plurality of
5 communications channels based upon whether the performance of the one
6 or more communications channels satisfies at least one performance
7 criterion; ~~and~~
8 selecting the first communications channel from the one or more communications
9 channels that are classified as satisfying the at least one performance
10 criterion; and
11 the method further comprises the computer-implemented steps of:
12 determining a number of communications channels of the plurality of
13 communications channels that satisfy the at least one performance
14 criterion; and
15 if the number of communications channels that satisfy the at least one
16 performance criterion is less than a specified number, reclassifying one or
17 more communications channels of the plurality of communications
18 channels.

1 12. (Cancelled)

1 13. (Currently Amended) The method of Claim 5, further comprising the
2 computer-implemented steps of:
3 determining the performance of the plurality of communications channels by
4 performing the computer-implemented steps of:
5 sending a request for performance data to at least one participant of the
6 plurality of participants;
7 in response to the request, receiving performance data from the at least one
8 participant; and

9 creating and maintaining performance data that indicates the performance
10 of one or more communications channels of the plurality of
11 communications channels for communications with one or more
12 participants from the plurality of participants.

1 14. (Cancelled)

1 15. (Cancelled)

1 16. (Cancelled)

1 17. (Currently Amended) The method ~~as recited in~~ of Claim 5, wherein:
2 the one or more criteria include the failure of the first participant;
3 the first participant is a master participant that performs the steps of selecting,
4 generating, providing, and receiving,
5 the second participant is a slave participant prior to being assigned to perform the
6 one or more functions,
7 the second participant is an associate master participant after being designated to
8 perform the one or more functions if any of the one or more criteria are
9 satisfied, and
10 the one or more participants include one or more slave participants.

1 18. (Cancelled)

1 19. (Currently Amended) The method of Claim 5, wherein:
2 the one or more participants includes the second participant; and
3 the second participant is designated by at least one other participant that is
4 selected from the group comprising (a) the first participant, (b) the first
5 participant and at least one other participant from the plurality of
6 participants, and (c) one or more participants from the plurality of
7 participants but not including the first participant.

1 20. (Cancelled)

1 21. (Cancelled)

1 22. (Currently Amended) A method for managing a communications system
2 comprising a plurality of participants, comprising the computer-implemented
3 steps of:
4 determining the performance of a first communications channel of a plurality of
5 communications channels between a first participant from the plurality of
6 participants and one or more other participants from the plurality of
7 participants; and
8 selecting, based upon the performance of the first communications channel
9 between the first participant and the one or more other participants, a
10 second participant from the one or more other participants;
11 sending at least a first communication from the second participant over the first
12 communications channel;
13 assigning, to a third participant from the plurality of participants, one or more
14 functions to be performed by the third participant; and
15 designating a fourth participant from the plurality of participants to perform the one or
16 more functions if any of one or more handoff criteria are satisfied; and
17 wherein the plurality of communications channels correspond to a set of
18 frequencies and the first communication received from the first participant
19 is based on a hopping sequence among at least two communications
20 channels of the plurality of communications channels, according to a
21 frequency hopping protocol.

1 23. (Currently Amended) The method of Claim 22, further comprising the computer-
2 implemented step of:
3 in response to any of the one or more handoff criteria being satisfied, assigning
4 the one or more functions to the fourth participant;

5 wherein the one or more participants includes the fourth participant; and
6 wherein the first participant is the same participant as the third participant.

1 24. (Currently Amended) The method of Claim 22, wherein the computer-
2 implemented step of designating the fourth participant is performed prior to a
3 condition of the third participant that prevents the third participant from
4 performing the one or more functions.

1 25. (Currently Amended) The method of Claim 22, wherein the computer-
2 implemented step of designating the fourth participant is performed prior to a
3 failure of the third participant.

1 26. (Cancelled)

1 27. (Cancelled)

1 28. (Currently Amended) A first communications device comprising:
2 an interface that is configured to receive data from a plurality of communications
3 devices and to transmit data to the plurality of communications devices;
4 and
5 a mechanism that is communicatively coupled to the interface and configured to:
6 perform one or more functions;
7 prior to a failure of the communications device that prevents the
8 communications device from performing any of the one or more
9 functions,
10 designate a second communications device from the plurality of
11 communications devices to perform the one or more
12 functions if any of a set of criteria are satisfied;
13 communicate with the second communications device to indicate
14 that the second communications device has been designated
15 to perform the one or more functions if any of the one or
16 more handoff criteria are satisfied;

17 select, based upon performance of a plurality of communications channels,
18 a first communications channel from the plurality of
19 communications channels;
20 generate first channel identification data that identifies the first
21 communications channel;
22 provide the first channel identification data to one or more
23 communications devices from the plurality of communications
24 devices; and
25 receive at least a first communication from the one or more communications
26 devices over a second communications channel from the plurality of
27 communications channels, wherein the second communications
28 channel is determined based on the first channel identification data that
29 identifies the first communications channel; and
30 wherein the plurality of communications channels correspond to a set of
31 frequencies and the first communication received from the one or more
32 communications devices is based on a hopping sequence among at least
33 two communications channels of the plurality of communications
34 channels, according to a frequency hopping protocol.

1 29. (Currently Amended) The first communications device ~~as recited in~~ of Claim 28,
2 wherein:
3 communications between the plurality of communications devices are made using a
4 frequency hopping sequence according to a frequency hopping protocol; and
5 the first communications device, the second communications device, and the one or
6 more communications devices are wireless communications devices; and
7 the plurality of communications devices includes a plurality of wireless mobile
8 communications devices.

1 30. (Cancelled)

1 31. (Cancelled)

1 32. (Currently Amended) The first communications device of Claim 28, wherein the
2 mechanism is further configured to:
3 select, based upon the performance of the plurality of communications channels
4 and at least one performance criterion, a third communications channel
5 from the plurality of communications channels;
6 generate second channel identification data that identifies the third communications
7 channel;
8 provide the second channel identification data over a particular communications
9 channel of the plurality of communications channels to one or more additional
10 communications devices from the plurality of communications devices,
11 wherein the particular communications channel is not the third
12 communications channel; and
13 receive at least a second communication from the one or more additional
14 communications devices over a fourth communications channel from the
15 plurality of communications channels, wherein the fourth communications
16 channel is determined based on the second channel identification data that
17 identifies the third communications channel.

1 33. (Currently Amended) The first communications device of Claim 28, wherein the
2 mechanism is further configured to:
3 provide the channel identification data to the one or more communications
4 devices over a specified communications channel of the plurality of
5 communications channels, wherein the specified communications channel
6 is not the first communications channel;
7 determine the performance of the plurality of communications channels used by
8 the plurality of communications devices; and
9 wherein at least the first communication from the one or more communications
10 devices includes performance data that indicates the performance of the
11 specified communications channel

1 34. (Cancelled)

1 35. (Cancelled)

1 36. (Currently Amended) The first communications device of Claim ~~35~~ 33, wherein:
2 the performance of the plurality of communications channels is determined based
3 on a channel performance testing technique selected from the group
4 consisting of a received signal strength indicator, a header error check, a
5 cyclic redundancy check, and forward error correction;
6 the first communications device is a master participant;
7 the second communications device is an associate master participant; and
8 the one or more communications devices are slave participants.

1 37. (Currently Amended) The first communications device of Claim 28, wherein the
2 mechanism is further configured to:
3 classify one or more communications channels of the plurality of communications
4 channels based upon whether the performance of the one or more
5 communications channels satisfies at least one performance criterion; ~~and~~
6 select the first communications channel from the one or more communications
7 channels that are classified as satisfying the at least one performance
8 criterion;
9 determine a number of communications channels of the plurality of
10 communications channels that satisfy the at least one performance
11 criterion; and
12 if the number of communications channels that satisfy the at least one
13 performance criterion is less than a specified number, reclassify one or
14 more communications channels of the plurality of communications
15 channels.

1 38. (Currently Amended) A computer-readable storage medium carrying one or more
2 sequences of instructions for managing a communications arrangement
3 comprising a plurality of participants, wherein execution of the one or more
4 sequences of instructions by one or more processors causes the one or more
5 processors to perform the steps of:
6 assigning, to a first participant from the plurality of participants, one or more
7 functions to be performed by the first participant;
8 prior to a failure of the first participant that prevents the first participant from
9 performing any of the one or more functions to be performed by the first
10 participant,
11 designating a second participant from the plurality of participants to
12 perform the one or more functions if any of one or more handoff
13 criteria are satisfied;
14 the first participant communicating with the second participant to indicate
15 that the second participant has been designated to perform the one
16 or more functions if any of the one or more handoff criteria are
17 satisfied;
18 in response to any of the one or more handoff criteria being satisfied, assigning
19 the one or more functions to the second participant; and
20 selecting, based upon performance of a plurality of communications channels and
21 at least one performance criterion, a first communications channel from
22 ~~the~~ a plurality of communications channels.

1 39. (Currently Amended) The computer-readable storage medium of Claim 38,
2 further comprising instructions which, when executed by the one or more
3 processors, cause the one or more processors to carry out the steps of:
4 generating channel identification data that identifies the first communications
5 channel; ~~and~~
6 providing the channel identification data over the first communications channel to
7 one or more participants from the plurality of participants; and

8 receiving at least a first communication from the one or more participants over a
9 second communications channel from the plurality of communications
10 channels, wherein the second communications channel is determined
11 based on the channel identification data.

1 40. (Cancelled)

1 41. (Currently Amended) A computer-readable storage medium carrying one or more
2 sequences of instructions for managing, based on performance, a communications
3 arrangement comprising a plurality of participants, wherein execution of the one
4 or more sequences of instructions by one or more processors causes the one or
5 more processors to perform the steps of:
6 selecting, based upon performance of a plurality of communications channels, a
7 first communications channel from the plurality of communications
8 channels;
9 generating channel identification data that identifies the first communications
10 channel;
11 providing the channel identification data to a one or more participants from the
12 plurality of participants;
13 receiving at least a first communication from the one or more participants over a
14 ~~second~~ the first communications channel from the plurality of
15 communications channels, wherein the ~~second~~ first communications
16 channel is determined based on the channel identification data;
17 assigning, to a first participant from the plurality of participants, one or more
18 functions to be performed by the first participant;
19 prior to a failure of the first participant, designating a second participant from the
20 plurality of participants to perform the one or more functions if any of one
21 or more handoff criteria are satisfied; and

22 wherein the plurality of communications channels correspond to a set of
23 frequencies and the first communication received from the one or more
24 participants is based on a hopping sequence among at least two
25 communications channels of the plurality of communications channels,
26 according to a frequency hopping protocol..

1 42. (Currently Amended) A computer-readable storage medium carrying one or more
2 sequences of instructions for assigning functions between participants and
3 selecting communications channels in a communications arrangement comprising
4 a plurality of participants, wherein execution of the one or more sequences of
5 instructions by one or more processors causes the one or more processors to
6 perform the steps of:
7 assigning, to a first participant from the plurality of participants, one or more
8 functions to be performed by the first participant;
9 prior to a failure of the first participant that prevents the first participant from
10 performing any of the one or more functions to be performed by the first
11 participant,
12 designating a second participant from the plurality of participants to
13 perform the one or more functions if any of one or more criteria are
14 satisfied;
15 the first participant communicating with the second participant to indicate
16 that the second participant has been designated to perform the one
17 or more functions if any of the one or more handoff criteria are
18 satisfied;
19 in response to any of the one or more criteria being satisfied, assigning the one or
20 more functions to the second participant;
21 selecting, based upon performance of a plurality of communications channels and
22 at least one specified criterion, a first communications channel from the
23 plurality of communications channels;
24 generating channel identification data that identifies the first communications
25 channel;

26 providing the channel identification data to a third participant from the plurality of
27 participants; ~~and~~
28 receiving a first communication from the third participant over a second
29 communications channel from the plurality of communications channels,
30 wherein the second communications channel is determined based on the
31 channel identification data that identifies the first communications
32 channel; and
33 wherein the plurality of communications channels correspond to a set of
34 frequencies and the first communication received from the one or more
35 participants is based on a hopping sequence among at least two
36 communications channels of the plurality of communications channels,
37 according to a frequency hopping protocol.

1 43. (Currently Amended) A computer-readable storage medium carrying one or more
2 sequences of instructions for managing a communications system comprising a
3 plurality of participants, wherein execution of the one or more sequences of
4 instructions by one or more processors causes the one or more processors to
5 perform the steps of:
6 determining the performance of a first communications channel of a plurality of
7 communications channels between a first participant from the plurality of
8 participants and one or more other participants from the plurality of
9 participants; ~~and~~
10 selecting, based upon the performance of the first communications channel
11 between the first participant and the one or more other participants, a
12 second participant from the one or more other participants;
13 sending at least a first communication from the second participant over the first
14 communications channel;
15 assigning, to a third participant from the plurality of participants, one or more
16 functions to be performed by the third participant; ~~and~~
17 designating a fourth participant from the plurality of participants to perform the one or
18 more functions if any of one or more handoff criteria are satisfied; and

19 wherein the plurality of communications channels correspond to a set of
20 frequencies and the first communication received from the first participant
21 is based on a hopping sequence among at least two communications
22 channels of the plurality of communications channels, according to a
23 frequency hopping protocol.

1 44. (New) A first communications device comprising:
2 an interface that is configured to receive data from a plurality of communications
3 devices and to transmit data to the plurality of communications devices; and
4 a mechanism that is communicatively coupled to the interface and configured to:
5 perform one or more functions;
6 prior to a failure of the first communications device that prevents the first
7 communications device from performing any of the one or more
8 functions,
9 designating a second communications device from the plurality of
10 communications devices to perform the one or more
11 functions if any of one or more handoff criteria are
12 satisfied;
13 communicate with the second communications device to indicate
14 that the second communications device has been designated
15 to perform the one or more functions if any of the one or
16 more handoff criteria are satisfied;
17 in response to any of the one or more handoff criteria being satisfied,
18 assign the one or more functions to the second communications
19 device; and
20 select, based upon performance of a plurality of communications channels
21 and at least one performance criterion, a first communications
22 channel from a plurality of communications channels.

1 45. (New) The first communications device of Claim 44, wherein the mechanism is
2 further configured to:
3 generate channel identification data that identifies the first communications
4 channel;
5 providing the channel identification data over the first communications channel to
6 one or more communications devices from the plurality of
7 communications devices; and
8 receive at least a first communication from the one or more communications
9 devices over a second communications channel from the plurality of
10 communications channels, wherein the second communications channel is
11 determined based on the channel identification data.

1 46. (New) A first communications device comprising:
2 an interface that is configured to receive data from a plurality of communications
3 devices and to transmit data to the plurality of communications devices; and
4 a mechanism that is communicatively coupled to the interface and configured to:
5 select, based upon performance of a plurality of communications channels,
6 a first communications channel from the plurality of
7 communications channels;
8 generate channel identification data that identifies the first
9 communications channel;
10 provide the channel identification data to one or more communications
11 devices from the plurality of communications devices;
12 receive at least a first communication from the one or more participants
13 over the first communications channel from the plurality of
14 communications channels, wherein the first communications
15 channel is determined based on the channel identification data;
16 assign, to a second communications device from the plurality of
17 communications devices, one or more functions to be performed by
18 the first communications device;

19 prior to a failure of the first communications device, designate a second
20 communications device from the plurality of communications
21 devices to perform the one or more functions if any of one or more
22 handoff criteria are satisfied; and
23 wherein the plurality of communications channels correspond to a set of
24 frequencies and the first communication received from the one or
25 more participants is based on a hopping sequence among at least
26 two communications channels of the plurality of communications
27 channels, according to a frequency hopping protocol.

1 47. (New) The first communications device of Claim 46, wherein:
2 the one or more communications devices includes the second communications
3 device; and
4 the second communications device is designated by at least one other communications
5 device that is selected from the group comprising (a) the first communications
6 device, (b) the first communications device and at least one other
7 communications device from the plurality of communications devices, and (c)
8 one or more communications devices from the plurality of communications
9 devices but not including the first communications device.

1 48. (New) A first communications device comprising:
2 an interface that is configured to receive data from a plurality of communications
3 devices and to transmit data to the plurality of communications devices; and
4 a mechanism that is communicatively coupled to the interface and configured to:
5 determine the performance of a first communications channel of a plurality
6 of communications channels between the first communications
7 device and one or more other communications devices from the
8 plurality of communications devices;

9 select, based upon the performance of the first communications channel
10 between the first communications device and the one or more other
11 communications devices, a second communications device from
12 the one or more other communications devices;
13 send at least a first communication from the second communications
14 device over the first communications channel;
15 assign, to a third communications device from the plurality of
16 communications devices, one or more functions to be performed by
17 the third communications device;
18 designating a fourth communications device from the plurality of
19 communications devices to perform the one or more functions if
20 any of one or more handoff criteria are satisfied; and
21 wherein the plurality of communications channels correspond to a set of
22 frequencies and the first communication received from the first
23 participant is based on a hopping sequence among at least two
24 communications channels of the plurality of communications
25 channels, according to a frequency hopping protocol.

1 49. (New) The communications device of Claim 48, wherein the mechanism is
2 further configured to:
3 in response to any of the one or more handoff criteria being satisfied, assigning
4 the one or more functions to the fourth participant;
5 wherein the one or more participants includes the fourth participant; and
6 wherein the first participant is the same participant as the third participant.

1 50. (New) The communications device of Claim 48, wherein the mechanism
2 designates the fourth participant prior to a condition of the third communications
3 device that prevents the third communications device from performing the one or
4 more functions.

- 1 51. (New) The communications device of Claim 48, wherein the mechanism
2 designates the fourth communications device prior to a failure of the third
3 communications device.
- 4 52. (New) The method of Claim 4, wherein the frequency hopping protocol is
5 selected from the group consisting of (a) a frequency hopping protocol defined by
6 Institute of Electrical and Electronics Engineers 802.15.1 Wireless Personal Area
7 Network Standard, and (b) a frequency hopping protocol that conforms to a
8 Bluetooth communications standard for transmissions over a 2.4 GHz band.
- 1 53. (New) The first communications device of Claim 28, wherein the mechanism is
2 further configured to:
3 determine the performance of the plurality of communications channels by
4 performing the computer-implemented steps of:
5 sending a request for performance data to at least one participant from the
6 plurality of participants;
7 in response to the request, receiving performance data from the at least one
8 participant; and
9 creating and maintaining performance data that indicates the performance
10 of one or more communications channels of the plurality of
11 communications channels for communications with one or more
12 participants from the plurality of participants.
- 1 54. (New) The first communications device of Claim 28, wherein:
2 the one or more criteria include the failure of the first communications device;
3 the first communications device is a master communications device,
4 the second communications device is a slave communications device prior to
5 being assigned to perform the one or more functions,
6 the second communications device is an associate master communications device
7 after being designated to perform the one or more functions if any of the
8 one or more criteria are satisfied, and
9 the one or more participants include one or more slave communications devices.

1 55. (New) The computer-readable storage medium of Claim 42, wherein:
2 communications between the plurality of participants are made using a frequency
3 hopping sequence according to a frequency hopping protocol;
4 the communications arrangement includes a wireless communications
5 arrangement; and
6 the plurality of participants includes a plurality of mobile devices.

1 56. (New) The computer-readable storage medium of Claim 42, wherein the channel
2 identification data is first channel identification data, and wherein the computer-
3 readable storage medium further comprises one or more sequences of instructions
4 which, when executed by the one or more processors, causes the one or more
5 processors to perform the steps of:
6 selecting, based upon the performance of the plurality of communications
7 channels and the at least one specified criterion, a third communications
8 channel from the plurality of communications channels;
9 generating second channel identification data that identifies the third
10 communications channel;
11 providing the second channel identification data over a particular communications
12 channel of the plurality of communications channels to one or more
13 additional participants from the plurality of participants, wherein the
14 particular communications channel is not the third communications
15 channel; and
16 receiving at least a second communication from the one or more additional
17 participants over a fourth communications channel from the plurality of
18 communications channels, wherein the fourth communications channel is
19 determined based on the second channel identification data that identifies
20 the third communications channel.

1 57. (New) The computer-readable storage medium of Claim 42, wherein the
2 instructions for providing the channel identification data to the one or more
3 participants further comprises one or more sequences of instructions which, when
4 executed by the one or more processors, causes the one or more processors to
5 perform the steps of:
6 providing the channel identification data to the one or more participants over a
7 third communications channel of the plurality of communications
8 channels, wherein the third communications channel is not the first
9 communications channel;
10 determining the performance of the plurality of communications channels used by
11 the plurality of participants; and
12 wherein at least the first communication from the one or more participants
13 includes data that indicates the performance of the third communications
14 channel.

1 58. (New) The computer-readable storage medium of Claim 57, wherein:
2 the performance of the plurality of communications channels is determined based
3 on a channel performance testing technique selected from the group
4 consisting of a received signal strength indicator, a header error check, a
5 cyclic redundancy check, and forward error correction;
6 the first communications device is a master participant;
7 the second communications device is an associate master participant; and
8 the one or more communications devices are slave participants.

1 59. (New) The computer-readable storage medium of Claim 42, wherein the
2 instructions for selecting the first communications channel from the plurality of
3 communications channels further comprises one or more sequences of instructions
4 which, when executed by the one or more processors, causes the one or more
5 processors to perform the steps of:

6 classifying one or more communications channels of the plurality of
7 communications channels based upon whether the performance of the one
8 or more communications channels satisfies at least one performance
9 criterion;
10 selecting the first communications channel from the one or more communications
11 channels that are classified as satisfying the at least one performance
12 criterion; and
13 the method further comprises the computer-implemented steps of:
14 determining a number of communications channels of the plurality of
15 communications channels that satisfy the at least one performance
16 criterion; and
17 if the number of communications channels that satisfy the at least one
18 performance criterion is less than a specified number, reclassifying one or
19 more communications channels of the plurality of communications
20 channels.

1 60. (New) The computer-readable storage medium of Claim 42, further comprising
2 one or more sequences of instructions which, when executed by the one or more
3 processors, causes the one or more processors to perform the steps of:
4 determining the performance of the plurality of communications channels by
5 performing the computer-implemented steps of:
6 sending a request for performance data to at least one participant from the
7 plurality of participants;
8 in response to the request, receiving performance data from the at least one
9 participant; and
10 creating and maintaining performance data that indicates the performance
11 of one or more communications channels of the plurality of
12 communications channels for communications with one or more
13 participants from the plurality of participants.

- 1 61. (New) The computer-readable storage medium of Claim 42, wherein:
2 the one or more criteria include the failure of the first participant;
3 the first participant is a master participant that performs the steps of selecting,
4 generating, providing, and receiving,
5 the second participant is a slave participant prior to being assigned to perform the
6 one or more functions,
7 the second participant is an associate master participant after being designated to
8 perform the one or more functions if any of the one or more criteria are
9 satisfied, and
10 the one or more participants include one or more slave participants.
- 1 62. (New) The computer-readable storage medium of Claim 42, wherein:
2 the one or more participants includes the second participant; and
3 the second participant is designated by at least one other participant that is
4 selected from the group comprising (a) the first participant, (b) the first
5 participant and at least one other participant from the plurality of
6 participants, and (c) one or more participants from the plurality of
7 participants but not including the first participant.
- 1 63. (New) The computer-readable storage medium of Claim 41, wherein the
2 frequency hopping protocol is selected from the group consisting of (a) a
3 frequency hopping protocol defined by Institute of Electrical and Electronics
4 Engineers 802.15.1 Wireless Personal Area Network Standard, and (b) a
5 frequency hopping protocol that conforms to a Bluetooth communications
6 standard for transmissions over a 2.4 GHz band.
- 1 64. (New) The computer-readable storage medium of Claim 43, further comprising
2 one or more sequences of instructions which, when executed by the one or more
3 processors, causes the one or more processors to perform the steps of:
4 in response to any of the one or more handoff criteria being satisfied, assigning
5 the one or more functions to the fourth participant;

6 wherein the one or more participants includes the fourth participant; and
7 wherein the first participant is the same participant as the third participant.

1 65. (New) The computer-readable storage medium of Claim 43, wherein the step of
2 designating the fourth participant is performed prior to a condition of the third
3 participant that prevents the third participant from performing the one or more
4 functions.

1 66. (New) The computer-readable storage medium of Claim 43, wherein the step of
2 designating the fourth participant is performed prior to a failure of the third
3 participant.